

17 α -hydroxylase were examined by western blotting and RT-PCR, respectively. Annexin A5 significantly stimulated testosterone secretion from rat Leydig cells in dose- and time-dependent manners and increased mRNA and protein expression of StAR, P450scc, 3 β -HSD and 17 β -HSD but not 17 α -hydroxylase. Annexin A5 knockdown by siRNA significantly decreased the level of testosterone and protein expression of P450scc, 3 β -HSD and 17 β -HSD. The significant activation of ERK1/2 signaling was observed at 5, 10, and 30 min after annexin A5 treatment. After the pretreatment of Leydig cells with ERK inhibitor PD98059 (50 μ mol/L) for 20 min, the effects of annexin A5 on promoting testosterone secretion and increasing the expression of P450scc, 3 β -HSD and 17 β -HSD were completely abrogated ($P < 0.05$). Thus, ERK1/2 signaling is involved in the roles of annexin A5 in mediating testosterone production and the expression of P450scc, 3 β -HSD and 17 β -HSD in Leydig cells.

Keywords: Annexin A5; testosterone; steroidogenic acute regulatory (StAR); P450scc; 3 β -hydroxysteroid dehydrogenase (3 β -HSD); 17 β -hydroxysteroid dehydrogenase (17 β -HSD)

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AB081. Research on epididymis inflammatory mass in 1,021 patients with varicocele

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Background: To study the morbidity situation of inflammatory mass in epididymis head of varicocele (VC)

patients and explore the mechanism of VC causing male sterility.

Methods: In total, 1,021 cases of VC with male infertility including 989 cases of VC on the left side, 554 cases of VC on both sides and 8 cases of VC on the right side, divided in mild-to-moderate group and severe group respectively. And 107 cases of male infertility without VC as control group. Compared the incidence and location of the epididymis inflammatory mass, the temperature of the scrotum, sperm viability (a + b)%, neutral α -glucosidase levels and sex hormone levels between these groups.

Results: The incidence of inflammatory mass on the left side of the epididymis head were 21.8% [167] in mild-to-moderate group of VC on the left side, 58.1% [54] in severe group of VC on the left side, 14.4% [20] in mild-to-moderate group of VC on both sides, 26.7% [4] in severe group of VC on both sides and 12.1% [13] in control group. The incidence of inflammatory mass on both sides of the epididymis head were 48.4% [371] in mild-to-moderate group of VC on the left side, 7.5% [7] in severe group of VC on the left side, 28.8% [40] in mild-to-moderate group of VC on both sides, 25% [3] in severe group of VC on both sides, 25% [2] in group of VC on the right side and 23.4% [25] in control group. The incidence of inflammatory mass on the epididymis head in cases of VC with male infertility was higher than that in cases of male infertility without VC ($P < 0.05$). The incidence of inflammatory mass on the cauda epididymis was 3.0% [23] in mild-to-moderate group of VC on the left side, 0.6% [8] in severe group of VC on the left side, 2.0% [3] in mild-to-moderate group of VC on both sides, 13.3% [2] in severe group of VC on both sides and 7.5% [8] in control group. VC patients with left and right scrotal temperatures higher than the control group, the difference was statistically significant ($P < 0.05$). Sperm viability in VC patients with epididymis inflammatory mass, VC patients without epididymis inflammatory mass, the control group with epididymis inflammatory mass and the control group without epididymis inflammatory mass were 17.42 ± 10.65 , 34.71 ± 12.31 , 20.45 ± 8.29 and 35.63 ± 8.75 , respectively. neutral α -glucosidase levels in these four groups were 19.13 ± 5.62 , 34.82 ± 7.51 , 26.47 ± 5.62 , 46.38 ± 9.27 , respectively. Sperm viability and neutral α -glucosidase levels in VC patients with epididymis inflammatory mass were significantly lower than other groups ($P < 0.05$).

Conclusions: The morbidity rate of epididymis inflammatory mass in VC patients was significantly higher. Epididymis inflammatory mass was direct cause that VC lower sperm motility and glycosidic levels.

Keywords: Male infertility; varicocele (VC); epididymis; inflammatory mass

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AB082. Compare the clinical effect of varicolectomy treatment between Secondary varicocele patients caused by nutcracker syndrome and primary varicocele

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Background: To compare the clinical effect of varicolectomy treatment between patients who were diagnosed as secondary varicocele caused by nutcracker syndrome (NCS) and primary varicocele patients.

Methods: The secondary varicocele patients combined with NCS admitted in our hospital were systematically reviewed. All these patients had no obvious related symptoms such as gross hematuria and abdominal pain and so on. After the comprehensive examinations, the patients underwent the operation of microsurgical varicolectomy. During the same period, the patients who were diagnosed as primary varicocele and underwent varicolectomy were randomly selected as control group. The patients were required to make follow up 6 months and 1 year after the surgery in clinic. The number of varicocele recurrence of the both groups was calculated. And the patients' numbers of improved semen quality, spouse pregnancy, testicular

and perineal discomfort improvements were analyzed to compare whether there was significant difference between the two groups by Chi-square test.

Results: In left varicocele patients combined with NCS, one year after left varicolectomy, the recurrence rate was elevated, patients' symptom of scrotal pain did not alleviate obviously, and the rate of the spouse pregnancy declined.

Conclusions: For the patients with secondary varicocele caused by NCS, compared with the primary varicocele patients, the surgical treatment efficacy declined, and its higher recurrence rate might be related with the velocity of the stenosis site in left renal vein.

Keywords: Varicocele; nutcracker syndrome (NCS)

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AB083. Abnormal white matter microstructural in lifelong premature ejaculation identified by tract-based spatial statistical analysis

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Background: To investigate the white matter microstructural changes association between untreated lifelong premature ejaculation (LPE) patients and controls by tract-based spatial statistical analysis. As well, to investigate how the depression and anxiety influence the result.

Methods: The sample consisted with 32 medication-naive adult men with clinical diagnosed LPE and matched 32 healthy controls. Tract-based spatial statistical (TBSS) were implemented to perform between-group analysis. The